

Article 10. Tank Systems**§66264.190. Applicability.**

The requirements of this article apply to owners and operators of facilities that use tank systems for transferring, storing or treating hazardous waste except as otherwise provided in subsections (a), (b) and (c) of this section or in section 66264.1 of this chapter.

(a) Tank systems that are used to transfer, store or treat hazardous waste which contains no free liquids and are situated inside a building with an impermeable floor are exempted from the requirements in section 66264.193. To demonstrate the absence or presence of free liquids in the transferred/stored/treated waste, EPA Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication No. SW-846 Third Edition and Updates, (incorporated by reference in section 66260.11 of this chapter) shall be used.

(b) Tank systems, including sumps, as defined in section 66260.10, that serve as part of a secondary containment system to collect or contain releases of hazardous wastes are exempted from the requirements in section 66264.193(a) of this article.

(c) Tanks, sumps, and other such collection devices or systems used in conjunction with drip pads, as defined in 66260.10 of this chapter and regulated under Chapter 14, Article 15.7, shall meet the requirements of this article.

NOTE: Authority cited: Sections 25150, 25159, 58004 and 58012, Health and Safety Code. Reference: Sections 25150, 25159 and 25159.5, Health and Safety Code; 40 CFR Section 264.190.

HISTORY

1. New section filed 5-24-91; operative 7-1-91 (Register 91, No. 22).
2. Amendment of first paragraph, new subsection (c) and amendment of Note filed 7-29-94; operative 8-29-94 (Register 94, No. 30).
3. Amendment of subsection (c) and NOTE filed 7-24-97; operative 7-24-97 pursuant to Government Code section 11343.4(d) (Register 97, No. 30).
4. Amendment of subsection (a) and NOTE filed 10-13-98; operative 11-12-98 (Register 98, No. 42).

§66264.191. Assessment of Existing Tank System's Integrity.

(a) Tanks shall have sufficient shell strength and, for closed tanks, pressure controls (e.g., vents) to assure that they do not collapse or rupture. The Department will review the design of the tanks, including the foundation, structural support, seams and pressure controls and seismic considerations. The Department shall require that a minimum shell thickness be maintained at all times to ensure sufficient shell strength. Factors to be considered in establishing minimum thickness include the width, height and materials of construction of the tank, and the specific gravity of the waste which will be placed in the tank. In reviewing the design of the tank and approving a minimum thickness, the Department shall rely upon appropriate industrial design standards and other available information.

(b) For each existing tank system that does not have secondary containment meeting the requirements of section 66264.193, the owner or operator shall determine that the tank system is not leaking or is unfit for use. Except as provided in subsections (d) and (g) of this section, and in addition to the requirements of subsection (f) of this section, the owner or operator shall obtain and keep on file at the facility a written assessment reviewed and certified by an independent, qualified professional engineer, registered in California, in accordance with section 66270.11(d), that attests to the tank system's integrity by the dates indicated below:

(1) January 12, 1988, for tanks containing RCRA hazardous wastes, unless:

(A) the owner or operator is a conditionally exempt small quantity generator as defined in 40 CFR section 261.5, or a 100 to 1000 kg per month generator as defined in 40 CFR section 265.201, or

(B) the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1;

(2) July 1, 1992, for:

(A) tanks containing only non-RCRA hazardous wastes, and

(B) tanks containing RCRA hazardous wastes, if:

1. the owner or operator is a conditionally exempt small quantity generator or a 100 to 1000 kg per month generator, or

2. the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1, but the owner or operator is subject to the standards of this article.

(c) This assessment shall determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the waste(s) to be transferred, stored or treated, to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment shall consider the following:

(1) design standard(s), if available, according to which the tank and ancillary equipment were constructed;

(2) hazardous characteristics of the waste(s) that have been and will be handled;

(3) existing corrosion protection measures;

(4) documented age of the tank system, if available (otherwise, an estimate of the age);

(5) results of a leak test, internal inspection, or other tank integrity examination such that:

(A) for non-enterable underground tanks, the assessment shall include a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects, and

(B) for other than non-enterable underground tanks and for ancillary equipment, this assessment shall include either a leak test, as described above, or other integrity examination, that is certified by an independent, qualified, professional engineer, registered in California, in accordance with section 66270.11(d), that addresses cracks, leaks, corrosion, and erosion; and

(6) those design requirements and factors listed in subsection (a) of this section.

(d) For tank systems that transfer, store or treat materials that become hazardous wastes subsequent to the dates indicated below, this assessment shall be conducted within 12 months after the date that the waste becomes a hazardous waste, except as provided in subsection (g) of this section:

(1) July 14, 1986, for tanks containing RCRA hazardous wastes, unless:

(A) the owner or operator is a conditionally exempt small quantity generator as defined in 40 CFR section 261.5, or a 100 to 1000 kg per month generator as defined in 40 CFR section 265.201, or

(B) the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1;

(2) July 1, 1991, for:

(A) tanks containing only non-RCRA hazardous wastes, and

(B) tanks containing RCRA hazardous wastes, if:

1. the owner or operator is a conditionally exempt small quantity generator or a 100 to 1000 kg per month generator, or

2. the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1, but the owner or operator is subject to the standards of this article.

(e) If, as a result of the assessment conducted in accordance with subsection (b) or (g) of this section, a tank system is found to be leaking or unfit for use, the owner or operator shall comply with the requirements of section 66264.196.

(f) Owners or operators of all existing tank systems shall submit to the Department with Part B of the application for a hazardous waste facility permit, a written statement, signed by an independent, qualified professional engineer, registered in California, in accordance with section 66270.11(d), attesting that the tanks and containment system are suitably designed to achieve the requirements of this article.

(g)(1) Notwithstanding subsections (b) through (d) of this section, for each existing tank system that does not have secondary containment meeting the requirements of section 66264.193 and which meets the criteria specified in subsection (g)(2) of this section, the assessment specified in subsection (i) of this section shall be conducted by January 24, 1998. This assessment shall be reviewed and certified by an independent, qualified, professional engineer, registered in California, in accordance with section 66270.11(d), that attests to the tank system's integrity. The assessment shall be kept on file at the facility until closure of the facility and shall be valid for a period of one year from the date the assessment was certified.

(2) The provisions of subsection (g)(1) of this section apply only to:

(A) onground or aboveground tank systems containing only non-RCRA hazardous wastes generated onsite, and tank systems authorized under Permit-by-Rule pursuant to Chapter 45 of this division, Conditional Authorization pursuant to HSC 25200.3, and Conditional Exemption pursuant to HSC 25201.5, and

(B) onground or aboveground tank systems containing RCRA hazardous wastes generated onsite, if:

1. the owner or operator is a conditionally exempt small quantity generator as defined in 40 CFR section 261.5, or a small quantity generator of more than 100 kg but less than 1000 kg per month as defined in 40 CFR section 265.201, or

2. the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1, but the owner or operator is subject to the standards of this article.

(h) A generator or owner or operator authorized pursuant to Permit-by-Rule pursuant to Chapter 45 of this division, Conditional Authorization pursuant to HSC 25200.3, or Conditional Exemption pursuant to HSC 25201.5, operating a non-RCRA underground tank system or an underground tank system otherwise exempt from permitting requirements pursuant to the federal act, shall comply with the applicable standards of Title 23 of the California Code of Regulations relating to underground tank systems.

(i) The tank system assessment shall include all of the following information:

(1) tank configuration (i.e., horizontal, vertical), and gross capacity (in gallons);

(2) design standard(s), if available, according to which the tank and ancillary equipment were constructed, and all of the following information;

(A) material of construction;

(B) material thickness and the method used to determine the thickness;

(C) description of tank system piping (material, diameter);

(D) description of any internal and external pumps; and

(E) sketch or drawing of tank including dimensions.

(3) documented age of the tank system, if available, otherwise, an estimate of the age based on owner or operator knowledge;

(4) description and evaluation of the adequacy of any leak detection equipment;

(5) description and evaluation of any corrosion protection equipment;

(6) description and evaluation of any spill prevention or overfill equipment;

(7) hazardous characteristics of the waste(s) that have been or will be handled;

(8) description of any structural damage or inadequate construction or installation such as cracks, punctures, or damaged fittings. All discrepancies shall be documented in the assessment and remedied before the tank system

is certified for use.

(9) results of a leak test, internal inspection, or other tank system integrity examination including the type of integrity examination performed (i.e., ultrasonic, internal examination, volumetric tank test, pipeline pressure test). Tank system integrity or leak test requirements must be in compliance with all local requirements. Prior to conducting a tank system integrity test or leak test, contact local agency staff for local requirements.

(10) estimated remaining service life of the tank system based on findings of subsections (i)(1) through (i)(9).

NOTE: Authority cited: Sections 25150, 25159, 58004 and 58012, Health and Safety Code. Reference: Sections 25159 and 25159.5, Health and Safety Code; 40 CFR Section 264.191.

HISTORY

1. New section filed 5-24-91; operative 7-1-91 (Register 91, No. 22).
2. Amendment of section and Note filed 6-19-95 as an emergency; operative 6-19-95 (Register 95, No. 25). A Certificate of Compliance must be transmitted to OAL by 10-17-95 or emergency language will be repealed by operation of law on the following day.
3. Amendment of section and NOTE refiled 10-16-95 as an emergency; operative 10-16-95 (Register 95, No. 42). A Certificate of Compliance must be transmitted to OAL by 2-13-96 or emergency language will be repealed by operation of law on the following day.
4. Amendment of section and NOTE refiled 2-16-96 as an emergency; operative 2-16-96 (Register 96, No. 7). A Certificate of Compliance must be transmitted to OAL by 6-15-96 or emergency language will be repealed by operation of law on the following day.
5. Amendment of section and NOTE refiled 6-17-96 as an emergency; operative 6-17-96 (Register 96, No. 25). A Certificate of Compliance must be transmitted to OAL by 10-15-96 or emergency language will be repealed by operation of law on the following day.
6. Amendment of section and NOTE refiled 10-15-96 as an emergency; operative 10-15-96 (Register 96, No. 42). A Certificate of Compliance must be transmitted to OAL by 2-12-97 or emergency language will be repealed by operation of law on the following day.
7. Amendment of section and NOTE refiled; operative 2-11-97 as an emergency, including additional amendment of NOTE; operative 2-11-97 (Register 97, No. 7). A Certificate of Compliance must be transmitted to OAL by 6-11-97 or emergency language will be repealed by operation of law on the following day.
8. Certificate of Compliance as to 2-11-97 order transmitted to OAL 6-10-97; disapproved by OAL and order of repeal as to 2-11-97 filed on 7-24-97 (Register 97, No. 30).
9. Certificate of Compliance as to 2-11-97 order, including amendment of section and NOTE, resubmitted to OAL and approved on 7-24-97 (Register 97, No. 30).

§66264.192. Design and Installation of New Tank Systems or Components.

(a) Tanks shall have sufficient shell strength and, for closed tanks, pressure controls (e.g., vents) to assure that they do not collapse or rupture. The Department will review the design of the tanks, including the foundation, structural support, seams and pressure controls and seismic considerations. The Department shall require that a minimum shell thickness be maintained at all times to ensure sufficient shell strength. Factors to be considered in establishing minimum thickness include the width, height and materials of construction of the tank, and the specific gravity of the waste which will be placed in the tank. In reviewing the design of the tank and approving a minimum thickness, the Department shall rely upon appropriate industrial design standards and other available information.

(b) Owners or operators of new tank systems or components shall obtain and submit to the Department, at time of submittal of Part B information, a written assessment, reviewed and certified by an independent, qualified professional engineer, registered in California, in accordance with section 66270.11(d), attesting that the tank system has sufficient structural integrity and is acceptable for the transferring, storing and treating of hazardous waste and that the tanks and containment system are suitably designed to achieve the requirements in this article. The assessment shall show that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be transferred, stored or treated, and corrosion protection to ensure that it will not collapse, rupture, or fail. This assessment, which will be used by the Department to review and approve or disapprove the acceptability of the tank system design, shall also include, at a minimum, the following information:

- (1) design standard(s) according to which tank(s) and/or the ancillary equipment are constructed;
- (2) hazardous characteristics of the waste(s) to be handled;
- (3) for new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system will be in contact with the soil or with water, a determination by a corrosion expert of:
 - (A) factors affecting the potential for corrosion, including but not limited to:
 1. soil moisture content;
 2. soil pH;
 3. soil sulfides level;
 4. soil resistivity;
 5. structure to soil potential;
 6. influence of nearby underground metal structures (e.g., piping);
 7. existence of stray electric current;
 8. existing corrosion-protection measures (e.g., coating, cathodic protection), and
 - (B) the type and degree of external corrosion protection that are needed to ensure the integrity of the tank

system during the use of the tank system or component, consisting of one or more of the following:

1. corrosion-resistant materials of construction such as special alloys, fiberglass reinforced plastic, etc.;
2. corrosion-resistant coating (such as epoxy, fiberglass, etc.) with cathodic protection (e.g., impressed current or sacrificial anodes); and

3. electrical isolation devices such as insulating joints, flanges, etc.;

- (4) for underground tank system components that are likely to be adversely affected by vehicular traffic, a determination of design or operational measures that will protect the tank system against potential damage;

- (5) design considerations to ensure that:

- (A) tank foundations will maintain the load of a full tank;

- (B) tank systems will be anchored to prevent flotation or dislodgment where the tank system is placed in a saturated zone, or is located within a seismic fault zone subject to the standards of section 66264.18(a); and

- (C) tank systems will withstand the effects of frost heave; and

- (6) those design requirements and factors listed in subsection (a) of this section.

- (c) The owner or operator of a new tank system shall ensure that proper handling procedures are adhered to in order to prevent damage to the system during installation. Prior to covering, enclosing, or placing a new tank system or component in use, an independent, qualified installation inspector or an independent, qualified, professional engineer, registered in California, either of whom is trained and experienced in the proper installation of tank systems or components, shall inspect the system for the presence of any of the following items:

- (1) weld breaks;

- (2) punctures;

- (3) scrapes of protective coatings;

- (4) cracks;

- (5) corrosion;

- (6) other structural damage or inadequate construction/installation.

All discrepancies shall be remedied before the tank system is covered, enclosed, or placed in use.

- (d) New tank systems or components that are placed underground and that are back filled shall be provided with a backfill material that is a noncorrosive, porous, homogeneous substance and that is installed so that the backfill is placed completely around the tank and compacted to ensure that the tank and piping are fully and uniformly supported.

- (e) All new tanks and ancillary equipment shall be tested for tightness prior to being covered, enclosed, or placed in use. If a tank system is found not to be tight, all repairs necessary to remedy the leak(s) in the system shall be performed prior to the tank system being covered, enclosed, or placed into use.

- (f) Ancillary equipment shall be supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction.

- (g) The owner or operator shall provide the type and degree of corrosion protection recommended by an independent corrosion expert, based on the information provided under subsection (b)(3) of this section, or other corrosion protection if the Department believes other corrosion protection is necessary to ensure the integrity of the tank system during use of the tank system. The installation of a corrosion protection system that is field fabricated shall be supervised by an independent corrosion expert to ensure proper installation.

- (h) The owner or operator shall obtain and keep on file at the facility written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system in accordance with the requirements of subsections (c) through (g) of this section, that attest that the tank system was properly designed and installed and that repairs, pursuant to subsections (c) and (e) of this section, were performed. These written statements shall also include the certification statement as required in section 66270.11(d) of this division.

- (i)(1) Notwithstanding subsections (b) through (h) of this section, design and installation of new tank systems or components used to manage hazardous waste, and which meet the criteria specified in subsection (i)(2) of this section, are not subject to the requirements of subsections (i) through (n) of this section until January 24, 1998. The assessment specified in subsection (j) of this section shall be obtained prior to placing a new tank system in service and shall be kept on file at the facility. This assessment shall be reviewed and certified by an independent, qualified, professional engineer, registered in California, in accordance with section 66270.11(d), attesting that the tank system has sufficient structural integrity and is acceptable for the transferring, storing and treating of hazardous waste. The assessment shall be valid for a maximum period of five (5) years or the remaining service life of the tank system, as stated in the engineer's assessment, whichever is less. New tank systems that have been assessed pursuant to subsections (b) through (h) of this section prior to June 1, 1995 are not required to be reassessed pursuant to subsection (j) for a period of five years from the date of the assessment or June 1, 2000, whichever is the earlier date. If changes have been made to the tank system or new components have been added to the tank system subsequent to an assessment conducted prior to June 1, 1995, the tank system shall be reassessed pursuant to subsection (j).

- (2) The provisions of subsection (i)(1) of this section apply only to:

- (A) onground or aboveground tank systems containing only non-RCRA hazardous wastes generated onsite, and tank systems authorized under Permit-by-Rule pursuant to Chapter 45 of this division, Conditional Authorization pursuant to HSC 25200.3, and Conditional Exemption pursuant to HSC 25201.5, and

- (B) onground or aboveground tank systems containing RCRA hazardous wastes generated onsite, if:

1. the owner or operator is a conditionally exempt small quantity generator as defined in 40 CFR section 261.5, or a small quantity generator of more than 100 kg but less than 1000 kg per month as defined in 40 CFR section 265.201, or

2. the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1, but the owner or operator is subject to the standards of this article.

(j) A generator or owner or operator authorized pursuant to Permit-by-Rule pursuant to Chapter 45 of this division, Conditional Authorization pursuant to HSC 25200.3, or Conditional Exemption pursuant to HSC 25201.5, operating a non-RCRA underground tank system or an underground tank system otherwise exempt from permitting requirements pursuant to the federal act, shall comply with the applicable standards of Title 23 of the California Code of Regulations relating to underground tank systems.

(k) New, onground or aboveground non-RCRA tank systems or tank systems otherwise exempt from permitting requirements pursuant to the federal act, with secondary containment, whose design and installation have been approved by a local agency or agencies, may, at the discretion of the CUPA, be exempt from the engineering assessment specified in subsection (l) of this section, provided minimum criteria specified in subsections (k)(1) through (k)(3) of this section are met. If the CUPA determines to exempt a new tank system from the assessment required pursuant to this subsection, the exemption shall be for a period of not more than three (3) years from the date the exemption was granted. The tank system owner or operator shall submit documentation of local agency approval to the applicable CUPA for review and possible acceptance in lieu of the assessment specified in subsection (l) of this section. If there is no CUPA or the CUPA requests that the Department make a determination, the documentation shall be submitted to the Department.

(1) tank system must have secondary containment capable of containing 100 percent of the contents of the tank and ancillary piping volume; and

(2) if the tank system is exposed to precipitation, the secondary containment system must have sufficient capacity, in addition to that required in subsection (k)(1) of this section, to contain run-on and infiltration from a 25-year, 24-hour rainfall event;

(3) tank system secondary containment shall be provided with a leak detection system that is designed and operated so that it will detect either the failure of the primary and secondary containment structure or any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours, or at the earliest practicable time if the existing detection technology or site conditions will not allow detection of a release within 24 hours.

(l) The tank system assessment shall include all of the following information:

(1) tank configuration (i.e., horizontal, vertical), and gross capacity (in gallons);

(2) design standard(s), if available, according to which the tank and ancillary equipment were or will be constructed, and all of the following information;

(A) material of construction;

(B) material thickness and the method used to determine the thickness;

(C) description of tank system piping (material, diameter);

(D) description of any internal and external pumps; and

(E) sketch or drawing of tank including dimensions.

(3) documented age of the tank system (if tank was previously used), if available, (otherwise, an estimate of the age);

(4) description and evaluation of any leak detection equipment;

(5) description and evaluation of any corrosion protection equipment, devices, or material;

(6) description and evaluation of any spill prevention or overfill equipment;

(7) description and evaluation of secondary containment for the tank system (secondary containment must meet minimum standards as specified in subsections (k)(1) through (k)(3) of this section) including applicable secondary containment for ancillary equipment as required in subsection 66265.193(f);

(8) hazardous characteristics of the waste(s) that have been or will be handled;

(9) prior to placing a new tank system or component in use, an independent, qualified installation inspector or an independent, qualified, professional engineer, registered in California, either of whom is trained and experienced in the proper installation of tank systems, shall inspect the system or component for the presence of any of the following items and document in writing the results of the inspection:

(A) weld cracks or breaks;

(B) scrapes of protective coatings;

(C) corrosion;

(D) any structural damage or inadequate construction or installation such as cracks, punctures, damaged fittings. All discrepancies shall be documented in the assessment and remedied before the tank system is placed in use.

(10) all new tanks and ancillary equipment shall be tested for tightness prior to being placed in use. The results of the test(s) shall be documented in this assessment. Tank system integrity or leak test requirements must be in compliance with all local requirements. Prior to conducting a tank system integrity test or leak test, contact local agency staff for local requirements.

(11) estimated remaining service life of the tank system based on findings of subsections (l)(1) through (l)(10).

(m) The assessment specified in subsection (l) of this section is not required for the replacement of the following identical or functionally equivalent tank system parts or components:

(1) pumps (same type and capacity);

(2) plumbing or piping components such as unions, elbows, tees and gaskets;

(3) valves and check valves;

(4) piping and valve hangers and supports;

(n) Replacement of identical or functionally equivalent tank system parts or components not listed in subsection (m) of this section shall be approved by the CUPA prior to replacement or changeout. If the tank system part or component is determined to be identical or functionally equivalent by the CUPA, the assessment specified in subsection (l) of this section is not required. The owner or operator shall provide the CUPA, or the Department if there is no CUPA or the CUPA requests that the Department make a determination, with the following information in writing so that a determination can be made:

(1) name, address, and EPA identification number of the facility;

(2) date of planned replacement;

(3) description part or component to be replaced;

(4) description of the tank system and type of waste(s) handled;

(5) description of how the part or component is identical or functionally equivalent to the part or component to be replaced.

NOTE: Authority cited: Sections 25150, 25159, 58004 and 58012, Health and Safety Code. Reference: Sections 25159 and 25159.5, Health and Safety Code; 40 CFR Section 264.192.

HISTORY

1. New section filed 5-24-91; operative 7-1-91 (Register 91, No. 22).

2. New subsections (i)(1)-(i)(2)(B)2. filed 6-19-95 as an emergency; operative 6-19-95 (Register 95, No. 25). A Certificate of Compliance must be transmitted to OAL by 10-17-95 or emergency language will be repealed by operation of law on the following day.

3. New subsections (i)(1)-(i)(2)(B)2. refiled 10-16-95 as an emergency; operative 10-16-95 (Register 95, No. 42). A Certificate of Compliance must be transmitted to OAL by 2-13-96 or emergency language will be repealed by operation of law on the following day.

4. New subsections (i)(1)-(i)(2)(B)2 refiled 2-16-96 as an emergency; operative 2-16-96 (Register 96, No. 7). A Certificate of Compliance must be transmitted to OAL by 6-15-96 or emergency language will be repealed by operation of law on the following day.

5. New subsections (i)(1)-(i)(2)(B)2 refiled 6-17-96 as an emergency; operative 6-17-96 (Register 96, No. 25). A Certificate of Compliance must be transmitted to OAL by 10-15-96 or emergency language will be repealed by operation of law on the following day.

6. New subsections (i)(1)-(i)(2)(B)2, refiled 10-15-96 as an emergency; operative 10-15-96 (Register 96, No. 42). A Certificate of Compliance must be transmitted to OAL by 2-12-97 or emergency language will be repealed by operation of law on the following day.

7. New subsections (i)(1)-(i)(2)(B)2, refiled 2-11-97 as an emergency, including amendment of NOTE; operative 2-11-97 (Register 97, No. 7). A Certificate of Compliance must be transmitted to OAL by 6-11-97 or emergency language will be repealed by operation of law on the following day.

8. Certificate of Compliance as to 2-11-97 order transmitted to OAL 6-10-97; disapproved by OAL and order of repeal as to 2-11-97 filed on 7-24-97 (Register 97, No. 30).

9. Certificate of Compliance as to 2-11-97 order, including amendment of section and NOTE, resubmitted to OAL and approved on 7-24-97 (Register 97, No. 30).

10. Change without regulatory effect amending subsections (i)(1), (l)(10) and (n) filed 7—1—2004 pursuant to section 100, title 1, California Code of Regulations (Register 2004, No. 27).

§66264.193. Containment and Detection of Releases.

(a) In order to prevent the release of hazardous waste or hazardous constituents to the environment, secondary containment that meets the requirements of this section shall be provided (except as provided in subsections (f) and (g) of this section):

(1) for all new tank systems or components, prior to the tank system or component being put into service;

(2) for all existing tank systems, which have been used to transfer, store or treat EPA Hazardous Waste Nos. F020, F021, F022, F023, F026 and F027, within two years after the dates indicated below:

(A) January 12, 1987, for tanks containing RCRA hazardous wastes, unless:

1. the owner or operator is a conditionally exempt small quantity generator as defined in 40 CFR section 261.5, or a 100 to 1,000 kg per month generator as defined in 40 CFR section 265.201, or

2. the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1;

(B) July 1, 1991, for tanks containing RCRA hazardous wastes, if:

1. the owner or operator is a conditionally exempt small quantity generator or a 100 to 1,000 kg per month generator, or

2. the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1, but the owner or operator is subject to the standards of this article;

(3) for those existing tank systems of known and documented age, within two years after the dates indicated below or when the tank system has reached 15 years of age, whichever comes later:

(A) January 12, 1987, for tanks containing RCRA hazardous wastes, unless:

1. the owner or operator is a conditionally exempt small quantity generator as defined in 40 CFR section 261.5, or a 100 to 1,000 kg per month generator as defined in 40 CFR section 265.201, or

2. the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR

section 264.1;

(B) July 1, 1991, for:

1. tanks containing only non-RCRA hazardous wastes, and
2. tanks containing RCRA hazardous wastes, if:

a. the owner or operator is a conditionally exempt small quantity generator or a 100 to 1,000 kg per month generator, or

b. the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1, but the owner or operator is subject to the standards of this article.

(4)(A) for those existing tank systems described in subsection (a)(4)(B) of this section for which the age cannot be documented, within 8 years of January 12, 1987; but if the age of the facility is greater than 7 years as of January 12, 1987, secondary containment shall be provided by the time the facility reaches 15 years of age, or within 2 years of January 12, 1987, whichever comes later;

(B) subsection (a)(4)(A) of this section applies to existing tank systems as defined in section 66260.10 containing RCRA hazardous wastes, unless:

1. the owner or operator is a conditionally exempt small quantity generator or a 100 to 1,000 kg per month generator, or

2. the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1.

(5)(A) for those existing tank systems described in subsection (a)(5)(B) of this section for which the age cannot be documented, within 8 years from July 1, 1991; but if the age of the facility is greater than 7 years as of July 1, 1991, secondary containment shall be provided by the time the facility reaches 15 years of age, or within 2 years from July 1, 1991, whichever comes later;

(B) subsection (a)(5)(A) of this section applies to:

1. existing tank systems containing only non-RCRA hazardous wastes, and
2. existing tank systems containing RCRA hazardous wastes, if:

a. the owner or operator is a conditionally exempt small quantity generator or a 100 to 1,000 kg per month generator, or

b. the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1, but the owner or operator is subject to the standards of this article.

(6) for tank systems that transfer, store or treat materials that become hazardous wastes subsequent to the dates indicated below, within the time intervals required in subsections (a)(1) through (a)(5) of this section, except that the date that a material becomes a hazardous waste shall be used in place of the dates indicated below where these dates appear in subsections (a)(1) through (a)(5) of this section:

(A) January 12, 1987, for tanks containing RCRA hazardous wastes, unless:

1. the owner or operator is a conditionally exempt small quantity generator as defined in 40 CFR section 261.5, or a 100 to 1,000 kg per month generator as defined in 40 CFR section 265.201, or

2. the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1;

(B) July 1, 1991, for:

1. tanks containing only non-RCRA hazardous wastes, and
2. tanks containing RCRA hazardous wastes, if:

a. the owner or operator is a conditionally exempt small quantity generator or a 100 to 1,000 kg per month generator, or

b. the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1, but the owner or operator is subject to the standards of this article.

(b) Secondary containment systems shall be:

(1) designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater or surface water at any time during the use of the tank system; and

(2) capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

(c) To meet the requirements of subsection (b) of this section, secondary containment systems shall be at a minimum:

(1) constructed of or lined with materials that are compatible with the wastes(s) to be placed in the tank system and shall have sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which it is exposed, climatic conditions and the stress of daily operation (including stresses from nearby vehicular traffic);

(2) provided with a foundation or base underlying the tanks capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system and capable of preventing failure due to settlement, compression or uplift. This base shall be free of cracks or gaps and sufficiently impervious to contain leaks, spills and accumulated precipitation until the collected material is detected and removed;

(3) provided with a leak-detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours, or at the earliest practicable time if the owner or operator can demonstrate to the Department that existing detection technologies or site conditions will not allow detection of a release within 24 hours; and

(4) sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills or

precipitation. Spilled or leaked waste and accumulated precipitation shall be removed from the secondary containment system within as timely a manner as is necessary to prevent overflow of the containment system, but within no more than 24 hours, or in as timely a manner as possible to prevent harm to human health and the environment, if the owner or operator can demonstrate to the Department that removal of the released waste or accumulated precipitation cannot be accomplished within 24 hours and that overflow of the containment system will not occur.

(A) If the collected material is a hazardous waste under chapter 11 of this division, it shall be managed as a hazardous waste in accordance with all applicable requirements of chapters 12 through 15 of this division.

(B) If the collected material is discharged through a point source to waters of the United States, the owner or operator shall comply with the requirements of sections 301, 304, and 402 of the Federal Clean Water Act, as amended (33 U.S.C. sections 1311, 1314 and 1342, respectively).

(C) If the collected material is discharged to a Publicly Owned Treatment Works (POTW), the owner or operator shall comply with the requirements of section 307 of the Federal Clean Water Act, as amended (33 U.S.C. section 1317).

(D) If the collected material is released to the environment, the owner or operator shall comply with the applicable reporting requirements of Title 40 CFR Part 302.

(d) Secondary containment for tanks shall include one or more of the following devices:

- (1) a liner (external to the tank);
- (2) a vault;
- (3) a double-walled tank; or
- (4) an equivalent device as approved by the Department.

(e) In addition to the requirements of subsections (b), (c) and (d) of this section, secondary containment systems shall satisfy the following requirements.

(1) External liner systems shall be:

(A) designed or operated to contain precipitation from a 24-hour, 25-year storm event plus the greater of 10 percent of the aggregate volume of all tanks or 100 percent of the capacity of the largest tank within its boundary, whichever is greater;

(B) designed or operated to prevent run-on and infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity, in addition to that required in subsection (e)(1)(A) of this section, to contain run-on and infiltration from a 25-year, 24-hour rainfall event;

(C) free of cracks or gaps; and

(D) designed and installed to surround the tank completely and to cover all surrounding earth likely to come into contact with the waste if the waste is released from the tank(s) (i.e., capable of preventing lateral as well as vertical migration of the waste).

(2) Vault systems shall be:

(A) designed or operated to contain precipitation from a 24-hour, 25-year storm event plus the greater of 10 percent of the aggregate volume of all tanks or 100 percent of the capacity of the largest tank within its boundary, whichever is greater;

(B) designed or operated to prevent run-on and infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity, in addition to that required in subsection (e)(2)(A) of this section, to contain run-on and infiltration from a 25-year, 24-hour rainfall event;

(C) constructed with chemical-resistant water stops in place at all joints (if any);

(D) provided with an impermeable interior coating or lining that is compatible with the waste being transferred, stored or treated and that will prevent migration of waste into the concrete;

(E) provided with a means to protect against the formation of and ignition of vapors within the vault, if the waste being transferred, stored or treated:

1. meets the definition of ignitable waste under section 66261.21 of this division; or

2. meets the definition of reactive waste under section 66261.23 of this division, and may form an ignitable or explosive vapor; and

(F) provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

(3) Double-walled tanks shall be:

(A) designed as an integral structure (i.e., an inner tank completely enveloped within an outer shell) so that any release from the inner tank is contained by the outer shell;

(B) protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell; and

(C) provided with a built-in continuous leak detection system capable of detecting a release within 24 hours, or at the earliest practicable time, if the owner or operator can demonstrate to the Department, and the Department concludes, that the existing detection technology or site conditions would not allow detection of a release within 24 hours.

(f) Ancillary equipment shall be provided with secondary containment (e.g., trench, jacketing, double-walled piping) that meets the requirements of subsections (b) and (c) of this section except for:

(1) aboveground piping (exclusive of flanges, joints, valves and other connections) that are visually inspected for leaks on a daily basis;

(2) welded flanges, welded joints and welded connections, that are visually inspected for leaks on a daily basis;

- (3) sealless or magnetic coupling pumps and sealless valves, that are visually inspected for leaks on a daily basis; and
- (4) pressurized aboveground piping systems with automatic shut-off devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices) that are visually inspected for leaks on a daily basis.
- (g) The owner or operator may obtain a variance from the requirements of this section for existing above-ground tanks in place, if the Department finds, as a result of a demonstration by the owner or operator that alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous waste or hazardous constituents into the groundwater or surface water at least as effectively as secondary containment during the active life of the tank system, or that in the event of a release that does migrate to groundwater or surface water, no substantial present or potential hazard will be posed to human health or the environment.
- (1) In deciding whether to grant a variance based on a demonstration of equivalent protection of groundwater and surface water, the Department will consider:
- (A) the nature and quantity of the wastes;
 - (B) the proposed alternate design and operation;
 - (C) the hydrogeologic setting of the facility, including the thickness of soils present between the tank system and groundwater, and
 - (D) all other factors that would influence the quality and mobility of the hazardous constituents and the potential for the constituents to migrate to groundwater or surface water.
- (2) In deciding whether to grant a variance based on a demonstration of no substantial present or potential hazard, the Department will consider:
- (A) the potential adverse effects on groundwater, surface water and land quality taking into account:
 1. the physical and chemical characteristics of the waste in the tank system, including its potential for migration;
 2. the hydrogeological characteristics of the facility and surrounding land;
 3. the potential for health risks caused by human exposure to waste constituents;
 4. the potential for damage to wildlife, crops, vegetation and physical structures caused by exposure to waste constituents; and
 5. the persistence and permanence of the potential adverse effects;
 - (B) the potential adverse effects of a release on groundwater quality, taking into account:
 1. the quantity and quality of groundwater and the direction of groundwater flow;
 2. the proximity and withdrawal rates of groundwater users;
 3. the current and future uses of groundwater in the area; and
 4. the existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality;
 - (C) the potential adverse effects of a release on surface water quality, taking into account:
 1. the quantity and quality of groundwater and the direction of groundwater flow;
 2. the patterns of rainfall in the region;
 3. the proximity of the tank system to surface waters;
 4. the current and future uses of surface waters in the area and any water quality standards established for those surface waters; and
 5. the existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality; and
 - (D) the potential adverse effects of a release on the land surrounding the tank system, taking into account:
 1. the patterns of rainfall in the region; and
 2. the current and future uses of the surrounding land.
- (3) The owner or operator of a tank system, for which a variance from secondary containment has been granted in accordance with the requirements of subsection (g)(1) of this section, at which a release of hazardous waste has occurred from the primary tank system but has not migrated beyond the zone of engineering control (as established in the variance), shall:
- (A) comply with the requirements of section 66264.196, except subsection (b)(5); and
 - (B) decontaminate or remove contaminated soil to the extent necessary to:
 1. enable the tank system for which the variance was granted to resume operation with the capability for the detection of releases at least equivalent to the capability it had prior to the release; and
 2. prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water; and
 - (C) if contaminated soil cannot be removed or decontaminated in accordance with subsection (g)(3)(B) of this section, comply with the requirements of section 66264.197(b).
- (4) The owner or operator of a tank system, for which a variance from secondary containment has been granted in accordance with the requirements of subsection (g)(1) of this section, at which a release of hazardous waste has occurred from the primary tank system and has migrated beyond the zone of engineering control (as established in the variance), shall:
- (A) comply with the requirements of section 66264.196(b); and
 - (B) prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed or if groundwater has been contaminated, the owner or operator shall comply with the requirements of

section 66264.197(b); and

(C) if repairing, replacing or reinstalling the tank system, provide secondary containment in accordance with the requirements of subsections (a) through (f) of this section or reapply for a variance from secondary containment and meet the requirements for new tank systems in section 66264.192 if the tank system is replaced. The owner or operator shall comply with these requirements even if contaminated soil can be decontaminated or removed and groundwater or surface water has not been contaminated.

(h) The following procedures shall be followed in order to request a variance from secondary containment.

(1) The Department shall be notified in writing by the owner or operator that the facility intends to conduct and submit a demonstration for a variance from secondary containment as allowed in subsection (g) of this section at least 24 months prior to the date that secondary containment is required to be provided in accordance with subsection (a) of this section; or, if a variance is sought from the requirements of section 66264.193(i)(1), the demonstration shall be submitted to the Department with Part B of the permit application.

(2) As part of the notification, the owner or operator shall also submit to the Department a description of the steps necessary to conduct the demonstration and a timetable for completing each of the steps. The demonstration shall address each of the factors listed in subsection (g)(1) or subsection (g)(2) of this section.

(3) The demonstration for a variance shall be completed within 180 days after notifying the Department of an intent to conduct the demonstration.

(4) If a variance is granted under this subsection, the Department will require the permittee to construct and operate the tank system in the manner that was demonstrated to meet the requirements for the variance.

(i) All tank systems, until such time as secondary containment that meets the requirements of this section is provided, shall comply with the following:

(1) subsections (c)(2), (c)(4), (e)(1)(A) or (e)(2)(A) (except for tanks that do not contain free liquids), and (e)(1)(B) or (e)(2)(B);

(2) for nonenterable underground tanks, a leak test that meets the requirements of section 66264.191(c)(5) or other tank integrity method, as approved or required by the Department, shall be conducted at least annually;

(3) for other than nonenterable underground tanks, the owner or operator shall either conduct a leak test as in subsection (i)(2) of this section or develop a schedule and procedure for an assessment of the overall condition of the tank system by an independent, qualified professional engineer, registered in California, in accordance with section 66270.11(d). The schedule and procedure shall be adequate to detect obvious cracks, leaks, and corrosion or erosion that may lead to cracks and leaks. The owner or operator shall remove the stored waste from the tank, if necessary, to allow the condition of all internal tank surfaces to be assessed. The frequency of these assessments shall be based on the material of construction of the tank and its ancillary equipment, the age of the system, the type of corrosion or erosion protection used, the rate of corrosion or erosion observed during the previous inspection and the characteristics of the waste being stored or treated;

(4) for ancillary equipment, a leak test or other integrity assessment as approved by the Department shall be conducted at least annually;

(5) the owner or operator shall maintain on file at the facility a record of the results of the assessments conducted in accordance with subsections (i)(2) through (i)(4) of this section;

(6) if a tank system or component is found to be leaking or unfit for use as a result of the leak test or assessment in subsections (i)(2) through (i)(4) of this section, the owner or operator shall comply with the requirements of section 66264.196.

(j)(1) Notwithstanding subsection (a) through (c) of this section, secondary containment that meets the requirements of subsections (l) and (m) shall be provided for tank systems used to manage hazardous wastes generated onsite, and which meet the criteria specified in subsection (j)(2) of this section:

(A) prior to the tank system or component being placed in service for new tank systems or components; or
(B) by January 24, 1998 for existing tank systems.

(2) The provisions of subsection (j)(1) of this section apply only to:

(A) onground or aboveground tank systems containing only non-RCRA hazardous wastes generated onsite, and tank systems authorized under Permit-by-Rule pursuant to Chapter 45 of this division, Conditional Authorization pursuant to HSC 25200.3, and Conditional Exemption pursuant to HSC 25201.5, and

(B) onground or aboveground tank systems containing RCRA hazardous wastes generated onsite, if:

1. the owner or operator is a conditionally exempt small quantity generator as defined in 40 CFR section 261.5, or a small quantity generator of more than 100 kg but less than 1000 kg per month as defined in 40 CFR section 265.201, or

2. the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1, but the owner or operator is subject to the standards of this article.

(k) A generator or owner or operator authorized pursuant to Permit-by-Rule pursuant to Chapter 45 of this division, Conditional Authorization pursuant to HSC 25200.3, or Conditional Exemption pursuant to HSC 25201.5, operating a non-RCRA underground tank system or an underground tank system otherwise exempt from permitting requirements pursuant to the federal act, shall comply with the applicable standards of Title 23 of the California Code of Regulations relating to underground tank systems.

(l) Secondary containment for onground or aboveground generator and onsite tier (Permit-by Rule, Conditional Authorization, and Conditional Exemption), non-RCRA tank systems or tank systems otherwise exempt from permitting requirements pursuant to the federal act, shall consist of any of the devices listed in subsection (d) and satisfy the requirements of (e) of this section or any device or combination of devices as approved by the CUPA, or the Department if there is no CUPA or the CUPA requests that the Department makes a determination, which

would satisfy the following minimum requirements:

(1) designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, ground water, surface water, or air at any time during the use of the tank system; and

(2) capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

(m) Ancillary equipment shall be provided with secondary containment as specified in subsection (f) of this section or an alternative device or devices as approved in writing by the CUPA, or the Department if there is no CUPA or if the CUPA requests that the Department make a determination, which would prevent and/or detect any release of wastes out of the tank system before such wastes could migrate to the soil, ground water, or surface water at any time during the use of the tank system. The following are examples of tank system and ancillary equipment secondary containment alternatives or options that may be proposed for review and approval by the CUPA:

(1) traditional containment of entire system within a bermed containment area with visual and/or electronic leak detection monitoring;

(2) troughs or pipe runs with impermeable liners that incorporate the following:

(A) visual monitoring during hours of operation or;

(B) continuous electronic leak detection monitoring for releases; or

(C) sumps located at low elevations with leak detection monitors.

(3) double-walled piping with continuous interstitial monitoring or monitoring intervals located at low elevation points along pipeline;

(4) Double-walled piping with translucent or transparent sections located at low points or low endpoints so that visual monitoring is possible.

(n) A generator or owner or operator authorized pursuant to Permit-by-Rule pursuant to Chapter 45 of this division, Conditional Authorization pursuant to HSC 25200.3, and Conditional Exemption pursuant to HSC 25201.5, operating an onground or aboveground, non-RCRA tank system or a tank system otherwise exempt from permitting requirements pursuant to the federal act, that has 18 months or less remaining in service prior to planned closure of the tank system, may propose alternatives to retrofitting the tank system with secondary containment. Local agency requirements must be considered when proposing alternatives to secondary containment. The owner or operator shall provide the following information in writing to the CUPA, or the Department if there is no CUPA or the CUPA requests that the Department make a determination, so that a determination can be made whether the proposed alternative would be acceptable:

(1) name, address, and EPA identification number of the facility;

(2) date of planned closure;

(3) description of tank system to be closed and form of current authorization for the tank system;

(4) description of how the proposed alternative would provide adequate environmental protection such that the design, installation, and operation will be capable of detecting a release and preventing any migration of wastes or accumulated liquid out of the system to the soil, ground water, surface water, or air at any time during the remaining life of the tank system.

NOTE: Authority cited: Sections 25150 and 25159, Health and Safety Code. Reference: Sections 25143, 25159 and 25159.5, Health and Safety Code; 40 CFR Section 264.193.

HISTORY

1. New section filed 5-24-91; operative 7-1-91 (Register 91, No. 22).

2. Amendment of section and Note filed 6-19-95 as an emergency; operative 6-19-95 (Register 95, No. 25). A Certificate of Compliance must be transmitted to OAL by 10-17-95 or emergency language will be repealed by operation of law on the following day.

3. Amendment of section and NOTE refiled 10-16-95 as an emergency; operative 10-16-95 (Register 95, No. 42). A Certificate of Compliance must be transmitted to OAL by 2-13-96 or emergency language will be operation of law on the following day.

4. Amendment of section and NOTE refiled 2-16-96 as an emergency; operative 2-16-96 (Register 96, No. 7). A Certificate of Compliance must be transmitted to OAL by 6-15-96 or emergency language will be repealed by operation of law on the following day.

5. Amendment of section and NOTE refiled 6-17-96 as an emergency; operative 6-17-96 (Register 96, No. 25). A Certificate of Compliance must be transmitted to OAL by 10-15-96 or emergency language will be repealed by operation of law on the following day.

6. Amendment of section and NOTE refiled 10-15-96 as an emergency; operative 10-15-96 (Register 96, No. 42). A Certificate of Compliance must be transmitted to OAL by 2-12-97 or emergency language will be repealed by operation of law on the following day.

7. Amendment of section and NOTE refiled 2-11-97 as an emergency, including additional amendment of NOTE; operative 2-11-97 (Register 97, No. 7). A Certificate of Compliance must be transmitted to OAL by 6-11-97 or emergency language will be repealed by operation of law on the following day.

8. Certificate of Compliance as to 2-11-97 order transmitted to OAL 6-10-97; disapproved by OAL and order of repeal as to 2-11-97 filed on 7-24-97 (Register 97, No. 30).

9. Certificate of Compliance as to 2-11-97 order, including amendment of section and NOTE, resubmitted to OAL and approved on 7-24-97 (Register 97, No. 30).

10. Change without regulatory effect amending subsection (m)(3) filed 7—1—2004 pursuant to section 100, title 1, California Code of Regulations (Register 2004, No. 27).

§66264.194. General Operating Requirements.

(a) Hazardous wastes or other materials (e.g., treatment reagents) shall not be placed in a tank system if they could cause the tank, its ancillary equipment or the containment system to rupture, leak, corrode, or otherwise fail.

(b) The owner or operator shall use appropriate controls and practices to prevent spills and overflows from tank or containment systems. These include at a minimum:

- (1) spill prevention controls (e.g., check valves, dry disconnect couplings);
- (2) overfill prevention controls (e.g., level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank); and
- (3) maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation from at least a 24-hour, 25-year storm.

(c) The owner or operator shall comply with the requirements of section 66264.196 if a leak or spill occurs in the tank system.

NOTE: Authority cited: Sections 208, 25150 and 25159, Health and Safety Code. Reference: Sections 25159 and 25159.5, Health and Safety Code; 40 CFR Section 264.194.

HISTORY

- 1. New section filed 5-24-91; operative 7-1-91 (Register 91, No. 22).

§66264.195. Inspections.

(a) The owner or operator shall develop and follow a schedule and procedure for inspecting overfill controls and shall inspect the overfill controls at least once each operating day to ensure that they are in good working order.

(b) The owner or operator shall inspect at least once each operating day:

- (1) aboveground portions of the tank system, if any, to detect corrosion or releases of waste;
- (2) data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design; and
- (3) the construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (e.g., dikes) to detect corrosion, erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation);

(4) for uncovered tanks, the level of waste in the tank, to ensure compliance with section 66264.194(b)(3).

(c) The owner or operator shall inspect cathodic protection systems, if present, according to, at a minimum, the following schedule to ensure that they are functioning properly.

(1) The proper operation of the cathodic protection system shall be confirmed within six months after initial installation and annually thereafter.

(2) All sources of impressed current shall be inspected and/or tested, as appropriate, at least bimonthly (i.e., every other month).

(d) The owner or operator shall document in the operating record of the facility an inspection of those items in subsections (a) through (c) of this section.

(e) As part of the inspection schedule required in section 66264.15(b), and in addition to the specific requirements of subsection (a) of this section, the owner or operator shall develop a schedule and procedure for assessing the condition of the tank. The schedule and procedure shall be adequate to detect cracks, leaks, corrosion or erosion which may lead to cracks or leaks, or wall thinning to less than the thickness required under section 66264.191(a). Procedures for emptying a tank to allow entry and inspection of the interior shall be established, when necessary, to detect corrosion or erosion of the tank sides and bottom. The frequency of these assessments shall be based on the material of construction of the tank, type of corrosion or erosion observed during previous inspections and the characteristics of the waste being transferred, treated or stored.

NOTE: Authority cited: Sections 208, 25150 and 25159, Health and Safety Code. Reference: Sections 25159 and 25159.5, Health and Safety Code; 40 CFR Section 264.195.

HISTORY

- 1. New section filed 5-24-91; operative 7-1-91 (Register 91, No. 22).

§66264.196. Response to Leaks or Spills and Disposition of Leaking or Unfit-for-Use Tank Systems.

(a) As part of the contingency plan required under this chapter, the owner or operator shall specify the procedures the facility intends to use to respond to tank spills or leakage, including procedures and timing for expeditious removal of leaked or spilled waste and repair of the tank.

(b) A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, shall be removed from service immediately, and the owner or operator shall satisfy the following requirements.

(1) General emergency procedures. The owner or operator shall comply with applicable requirements of section 66264.56 of this division.

(2) Cessation of use; prevention of flow or addition of wastes. The owner or operator shall immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.

(3) Removal of waste from tank system or secondary containment system.

(A) If the release was from the tank system, the owner/operator shall, within 24 hours after detection of the leak or, if the owner/operator demonstrates that it is not possible, at the earliest practicable time, remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed.

(B) If the material released was to a secondary containment system, all released materials shall be removed within as timely a manner as is necessary to prevent overflow of the containment system, but within no more than 24 hours, or in as timely a manner as is possible to prevent harm to human health and the environment if the owner or operator provides the demonstration required by section 66264.193(c)(4).

(4) Containment of visible releases to the environment. The owner/operator shall immediately conduct a visual inspection of the release and, based upon that inspection:

(A) prevent further migration of the leak or spill to soils or surface water; and

(B) remove, and properly dispose of, any visible contamination of the soil or surface water.

(5) Notifications, reports.

(A) Any release to the environment, except as provided in subsection (b)(5)(B) of this section, shall be reported to the Department within 24 hours of its detection.

(B) A leak or spill of hazardous waste is exempted from the requirements of subsection (b)(5) of this section, but is not exempt from the requirements of section 66264.56, if it is:

1. less than or equal to a quantity of one (1) pound, and

2. immediately contained and cleaned up.

(C) Within 30 days of detection of a release to the environment, a report containing the following information shall be submitted to the Department:

1. likely route of migration of the release;

2. characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate);

3. results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within 30 days, these data shall be submitted to the Department as soon as they become available;

4. proximity to downgradient drinking water, surface water, and populated areas; and

5. description of response actions taken or planned.

(6) Provision of secondary containment, repair, or closure.

(A) Unless the owner/operator satisfies the requirements of subsections (b)(6)(B) through (D) of this section, the tank system shall be closed in accordance with section 66264.197.

(B) If the cause of the release was a spill that has not damaged the integrity of the system, the owner/operator may return the system to service as soon as the released waste is removed and repairs, if necessary, are made.

(C) If the cause of the release was a leak from the primary tank system into the secondary containment system, the system shall be repaired prior to returning the tank system to service.

(D) If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the owner/operator shall provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of section 66264.193 before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually. If the source is an aboveground component that can be inspected visually, the component shall be repaired and may be returned to service without secondary containment as long as the requirements of subsection (b)(7) of this section are satisfied. If a component is replaced to comply with the requirements of this subsection, that component shall satisfy the requirements for new tank systems or components in sections 66264.192 and 66264.193. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (e.g., the bottom of an inground or onground tank), the entire component shall be provided with secondary containment in accordance with section 66264.193 prior to being returned to use.

(7) Certification of major repairs. If the owner/operator has repaired a tank system in accordance with subsection (b)(6) of this section, and the repair has been extensive (e.g., installation of an internal liner; repair of a ruptured primary containment or secondary containment vessel), the tank system shall not be returned to service unless the owner/operator has obtained a certification by an independent, qualified, professional engineer, registered in California, in accordance with section 66270.11(d), that the repaired system is capable of handling hazardous wastes without release for the intended life of the system. This certification shall be submitted to the Department within seven days after returning the tank system to use.

NOTE: Authority cited: Sections 208, 25150 and 25159, Health and Safety Code. Reference: Sections 25159 and 25159.5, Health and Safety Code; 40 CFR Section 264.196.

HISTORY

1. New section filed 5-24-91; operative 7-1-91 (Register 91, No. 22).

§66264.197. Closure and Post-Closure Care.

(a) At closure of a tank system, the owner or operator shall remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated soils, and structures and equipment contaminated with waste, and manage them as hazardous waste, unless section 66261.3(e) of this division applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for tank systems shall meet all of the requirements specified in articles 7 and 8 of this chapter.

(b) If the owner or operator demonstrates that not all contaminated soils can be practicably removed or decontaminated as required in subsection (a) of this section, then the owner or operator shall close the tank system and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills section 66264.310. In addition, for the purposes of closure, post-closure, and financial responsibility, such a tank system is then considered to be a landfill, and the owner or operator shall meet all of the requirements for landfills specified in articles 7 and 8 of this chapter.

(c) If an owner or operator has a tank system that does not have secondary containment that meets the requirements of section 66264.193(b) through (f) and has not been granted a variance from the secondary containment requirements in accordance with section 66264.193(g), then:

(1) the closure plan for the tank system shall include both a plan for complying with subsection (a) of this section and a contingent plan for complying with subsection (b) of this section;

(2) a contingent post-closure plan for complying with subsection (b) of this section shall be prepared and submitted as part of the permit application;

(3) the cost estimates calculated for closure and post-closure care shall reflect the costs of complying with the contingent closure plan and the contingent post-closure plan, if those costs are greater than the costs of complying with the closure plan prepared for the expected closure under subsection (a) of this section;

(4) financial assurance shall be based on the cost estimates in subsection (c)(3) of this section;

(5) for the purposes of the contingent closure and post-closure plans, such a tank system is considered to be a landfill, and the contingent plans shall meet all of the closure, post-closure, and financial responsibility requirements for landfills under articles 7 and 8 of this chapter.

NOTE: Authority cited: Sections 208, 25150 and 25159, Health and Safety Code. Reference: Sections 25159 and 25159.5, Health and Safety Code; 40 CFR Section 264.197.

HISTORY

1. New section filed 5-24-91; operative 7-1-91 (Register 91, No. 22).

§66264.198. Special Requirements for Ignitable or Reactive Wastes.

(a) Ignitable or reactive waste shall not be placed in tank systems, unless:

(1) the waste is treated, rendered, or mixed before or immediately after placement in the tank system so that:

(A) the resulting waste, mixture, or dissolved material no longer meets the definition of ignitable or reactive waste under sections 66261.21 or 66261.23 of this division, and

(B) section 66264.17(b) is complied with; or

(2) the waste is transferred, stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react; or

(3) the tank system is used solely for emergencies.

(b) The owner or operator of a facility where ignitable or reactive waste is transferred, stored or treated in a tank shall comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjoining property line that can be built upon as required in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code," (1981), (incorporated by reference, see section 66260.11).

NOTE: Authority cited: Sections 208, 25150 and 25159, Health and Safety Code. Reference: Sections 25159 and 25159.5, Health and Code; 40 CFR Section 264.198.

HISTORY

1. New section filed 5-24-91; operative 7-1-91 (Register 91, No. 22).

§66264.199. Special Requirements for Incompatible Wastes.

(a) Incompatible wastes, or incompatible wastes and materials, shall not be placed in the same tank system, unless section 66264.17(b) is complied with.

(b) Hazardous waste shall not be placed in a tank system that has not been decontaminated and that previously held an incompatible waste or material, unless section 66264.17(b) is complied with.

NOTE: Authority cited: Sections 208, 25150 and 25159, Health and Safety Code. Reference: Sections 25159 and 25159.5, Health and Safety Code; 40 CFR Section 264.199.

HISTORY

1. New section filed 5-24-91; operative 7-1-91 (Register 91, No. 22).

§66264.200. Air Emission Standards.

The owner or operator shall manage all hazardous waste placed in a tank in accordance with the applicable requirements of Articles 27, 28 and 28.5 of this Chapter.

NOTE: Sections 25150, 25159, 25159.5, 25245 and 58012, Health and Safety Code. Reference: Sections 25150, 25159 and 25159.5, Health and Safety Code; and 40 CFR section 264.200.

HISTORY

1. Change without regulatory effect adding new section filed 6-11-99 pursuant to Health and Safety Code sections

